



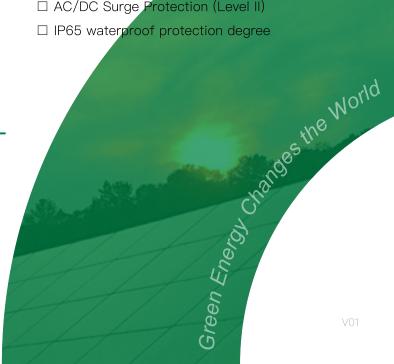
## *IESP* 50~60kW

## Three-Phase Hybrid Solar Storage Inverter

- ☐ 4 independent MPPT trackers, compatible with high-power PV modules
- ☐ DC over-sizing up to 1.8x
- ☐ Ultra-wide battery voltage range (150–820Vdc)
- ☐ Battery charge/discharge current 75A\*2
- ☐ Max. AC grid-connected overload output of 1.1x
- ☐ 100% three-phase unbalanced load
- ☐ Supports diesel generator input
- ☐ DC arc fault detection
- ☐ AC/DC Surge Protection (Level II)
- ☐ IP65 waterproof protection degree

## ABOUT SUNPAL.

- ☐ 16 years in PV industry, committed to independent R&D and production.
- ☐ Holds over 200 patents in energy storage, with unique industryleading technologies.
- ☐ Chooses top-quality international components to deliver highvalue products to customers.
- ☐ Upholds values of customer priority, proactivity, responsibility, and innovative breakthroughs.





Model	IESP500SH3	IESP550SH3	IESP600SH3	
AC OUTPUT				
Rated Output Power	50000W	55000W	60000W	
Max. Apparent Power	60000VA	60500VA	66000VA	
Peak Power (off-grid)	1.6 times of ra	ted power, 10s	1.5 times of rated power, 10	
Rated Output Voltage	220/380Vac,230/400Vac (3L+N+PE)			
Rated Output Current	75.9A	83.6A	91.2A	
Max. Output Current	91.2A	91.9A	100.3A	
Load Motor Capacity	21HP	23HP	25HP	
Power Factor	0.8 leading to 0.8 lagging			
THDI	<3% (of nominal power)			
Rated Frequency	50/60Hz ±0.3Hz			
Switch Time	10ms (typical value)			
Waveform	Pure sine wave			
BATTERY				
Battery Type	Lithium-ion Battery			
Number of Battery Input	2			
Battery Voltage Range	150-820Vdc			
Max. Charging/Discharging Current	150A (75A+75A)			
PV INPUT				
No. Of MPPT Trackers	4			
Max. PV Access Power	100kW	110kW	120kW	
Max. PV Input Power	90000W	90000W	96000W	
Rated PV Input Voltage	600Vdc			
Max. PV Input Voltage	1000Vdc			
Start-up Voltage	160Vdc			
Max. PV Input Current	40A*4			
Max. Short-circuit Current	60A*4			
MPPT Operating Voltage Range		150-850Vdc		
GRID/GENERATOR INPUT				
Rated Input Phase Voltage	3L/N/PE; 220/380V; 230/400V			
Rated Input Frequency	50/60Hz			
Max. Bypass Overload Current	200A			
EFFICIENCY				
MPPT Tracking Efficiency	>99%			
Max. Efficiency	98.1%			
European Efficiency	97.6%			
GENERAL DATA				
Parallel Capacity	1~9 Units (More than 2	units in parallel can form a th	ree-phase output)	

GENERAL DATA				
Parallel Capacity	$1\sim$ 9 Units (More than 2 units in parallel can form a three-phase output)			
Dimension	622x342x1010mm	Humidity	0~100%	
Weight	98kg	Cooling Method	Heat sink + intelligent fan cooling	
Protection Degree	IP65	Noise	<65dB	
Temperature	−40 to +60°C, >45°C Derate	Communication	RS485 / CAN / USB / Dry Contact	
Warranty	5 yeas	External Module	Wi-Fi/4G Stick (Optional)	
Certificate	EN50549,VDE4105,IEC62109-1,EC62109-2,EN61000-6-1, EN61000-6-3, FCC 15 class B			
PROTECTION				
PV Reverse Protection	Yes	Anti-Islanding Protection	Yes	
Residual-Current Monitoring	Yes	Insulation Resistance Monitoring	Yes	
Output Short-Circuit Protection	Yes	Output Over-Current Protection	Yes	
Over-Voltage Protection	AC type III/DC type II	Surge Protection	AC type II/DC type II	